

SPERMATOZOA QUALITY AND EXPRESSION OF HSP 70 POST THAWED FROZEN SEMEN LIMOSIN BASED ON TEMPERATURE AND DIFFERENT TIME

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ABSTRACK

The quality of frozen semen is one of the factors that influence artificial insemination. This study aims to determine the quality of spermatozoa and expression of HSP 70 post thawed of frozen semen of Limosin based on different thawing temperature, thawing duration, motility and viability also HSP 70 expression. This research is a laboratory experimental study. Sampling that been used for this study is Completely Randomized Design (RAL) factorial pattern. Temperature used for these research wich 35^oType equation here.°C, 37 °C and 39°C and using different duration (10, 20, 30 seconds) for each temperature. Application of sampling system usage RAL wich is cement that been used from the same storage, same year and same limosine cattle type. From motility and viability test showed a huge difference between thawing temperature 37 ° C with thawing duration 30 second to thawing temperature 39 ° C with duration of thawing 20 second. And the result of this research that best thawing temperature is 39°C with duration 20 second, this data is supported by the result of HSP 70 expression. The highest viability in this study was at 39^o C with thawed time of 20 seconds. At the lowest of motility at 37^o C with time 30 seconds. In the results of HSP 70 expression of spermatozoa there was a marked difference between thawing temperature of 37°C and thawing time of 10 seconds to thawed temperature of 39°C with thawed time of 20 seconds. The lowest of HSP 70 expression in this study was at 39^o C with thawed time of 20 seconds. At the lowest of motility at 37^oC with a time of 10 seconds.

Key Words : Artificial insemination, Frozen semen, Motility, Viability, HSP 70